Features of Applicants' Independent Claims

An object of the present invention is to provide a method and system for constant image processing by enhancing a particular frequency component to achieve a standardized result, irrespective of the picture element density of the original image signal. Applicant's independent claims[1] each include the feature of "determining transformation function defining parameters . . . on the basis of the *picture element density of the original image*." At least these features are absent from the Ito reference.

While the Examiner compares certain portions of the Ito reference to the above-noted features of Applicants claims, such a comparison is inapposite. To explain in greater detail, the Examiner compares Ito's signal, Sproc, to Applicant's above-noted features. Ito's Sproc signal derives from a Sorg signal.

Ito's Sorg signal is the original image signal and thereby constitutes the picture element value of the original image. The Ito reference thus uses a picture element value while Applicant's invention utilizes a picture element density.

Ito's picture element value is not the same thing as Applicant's picture element density. To explain in greater detail, Ito's Formula (6) includes: Sproc = Sorg + ß · Fusm . . . Formula (6) thus stands for the proposition that the emphasized image signal Sproc can be obtained by adding the emphasizing component Fsum to the original image signal Sorg, and the degree of emphasis can be changed by changing the coefficient ß, which the emphasizing component

[1] Claim 1 speaks to an image processing method; claim 8 speaks to an image processing system; and claim 15 speaks to a computer-readable recording medium loaded with a program for causing a computer to perform an image processing method.

Fsum is multiplied by. Ito thus is concerned with a picture element value and has nothing to do with a picture element density, let alone a picture element density of an original image, as is recited by Applicant's independent claims. Those skilled in the art know that "picture element value" is different from "picture element density."

Applicants assert the patentability of independent claims 1, 8 and 15, at least because of the Ito reference's above-noted deficiencies. Further, Applicants assert the patentability of dependent claims 2 – 7, 9 – 14, 16 – 21 and 100 – 114 by virtue of their respective dependencies. Applicants therefore request that the Examiner reconsider and withdraw this rejection.

Certain Features of Applicants' Dependent Claims

Method claim 7, system claim 14, and computer program product claim 21 all recite the following (using claim 7's method language as exemplary): "determining transformation function parameters for the transformation functions on the basis of the picture element density of the original image . . .[comprising] the steps of preparing transformation function defining parameters for at least two reference picture element densities, comparing the picture element density of the original image with the reference picture element densities, and determining the transformation function defining parameters for one of the reference picture densities closest to the picture element density of the original image as the transformation function defining parameters for the original image signal."

The Examiner compares Ito's Figs. 15 – 27, page 10, lines 53 – 59, and page 11, lines 1 – 19 to Applicant's recitation of preparing at least two reference picture element densities, comparing the picture element density of the original image with the reference picture element densities, and determining the transformation function defining parameters for one of the

reference picture densities closest to the picture element density of the original image as the transform. However, Ito is deficient for not teaching or suggesting these features. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 7, 14 and 21 at least for this additional reason.

Furthermore, as to claims 3, 10 and 17, the Examiner compares Ito's "f" function to Applicant's transforms being non-linear. However, as described at the bottom of page 23, Ito's f functions are entirely arbitrary (this conclusion is reiterated at page 25, lines 28 – 31). Because Ito's f functions are entirely arbitrary, they are neither explicitly nor inherently linear nor non-linear, and the Examiner's comparison is therefore illogical. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 3, 10 and 17 at least for this additional reason.

II. 35 U.S.C. § 103 Rejection

The Examiner rejects new claims 108, 111 and 114 under 35 U.S.C. § 103 in view of a combination of Ito and U.S.P. No. 5,694,447 to Ito ("Ito '447"). This rejection is respectfully traversed as follows.

The Examiner admits that Ito fails to teach or suggest the picture element density of the original image is the read density at which a radiation image (recorded on a stimulable phosphor sheet) is read (*see* the instant Office Action at page 7). The Examiner alleges that these features are found in Ito '447 at column 3, lines 15 – 32.

Col. 3, lines 15 – 32, however, merely discusses a very high-level summary of the concept of luminescent detection of stimulable phosphor sheets, and absolutely fails to teach or

suggest anything at all about picture element density. Applicants therefore request that the Examiner reconsider and withdraw this rejection

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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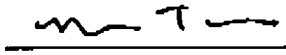
I hereby certify that this RESPONSE UNDER 37 C.F.R. § 1.116 is being facsimile transmitted to the U.S. Patent and Trademark Office this 19th day of August, 2004.



Mariann Tam